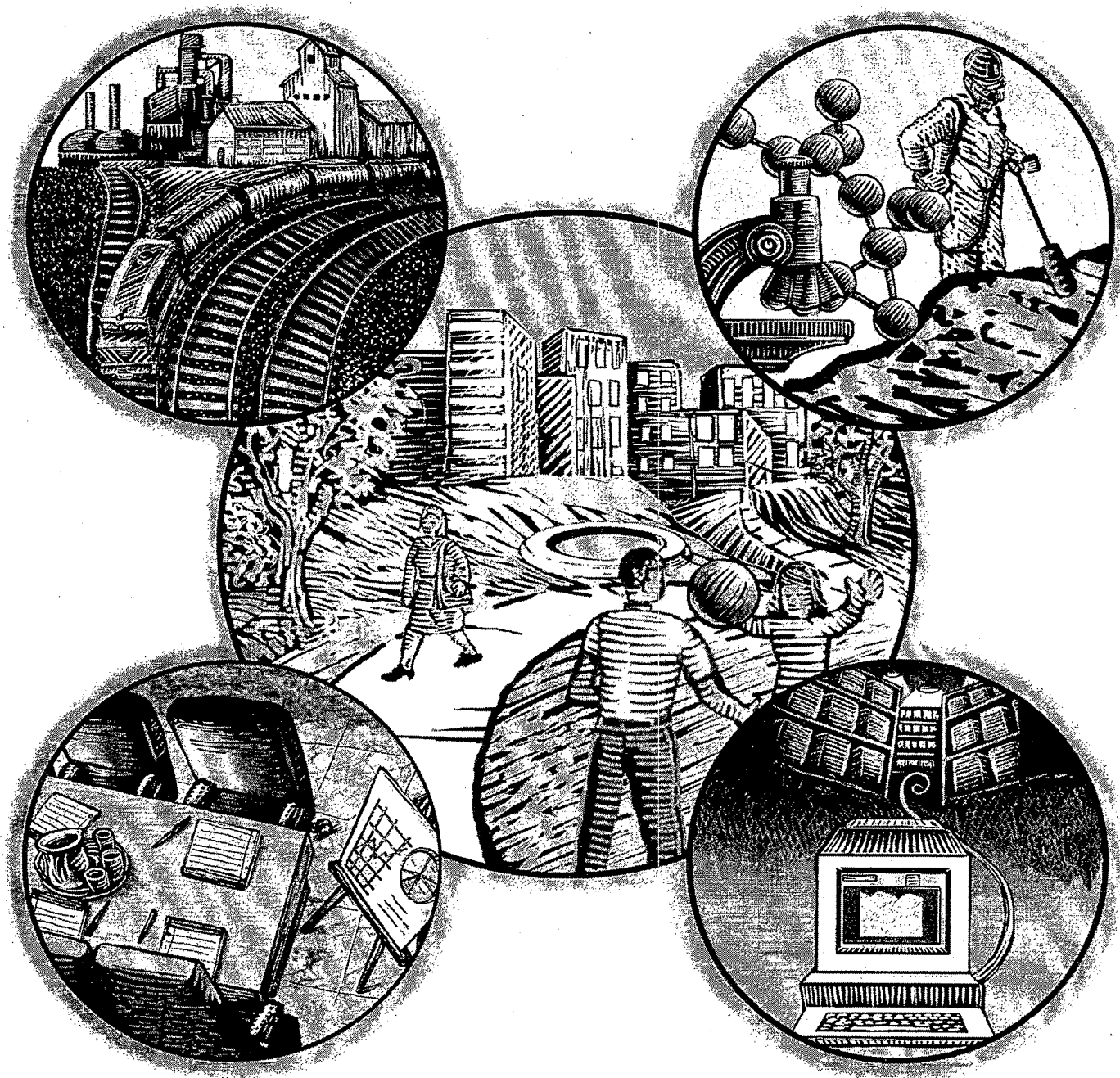




Directory of Technology Support Services to Brownfields Localities



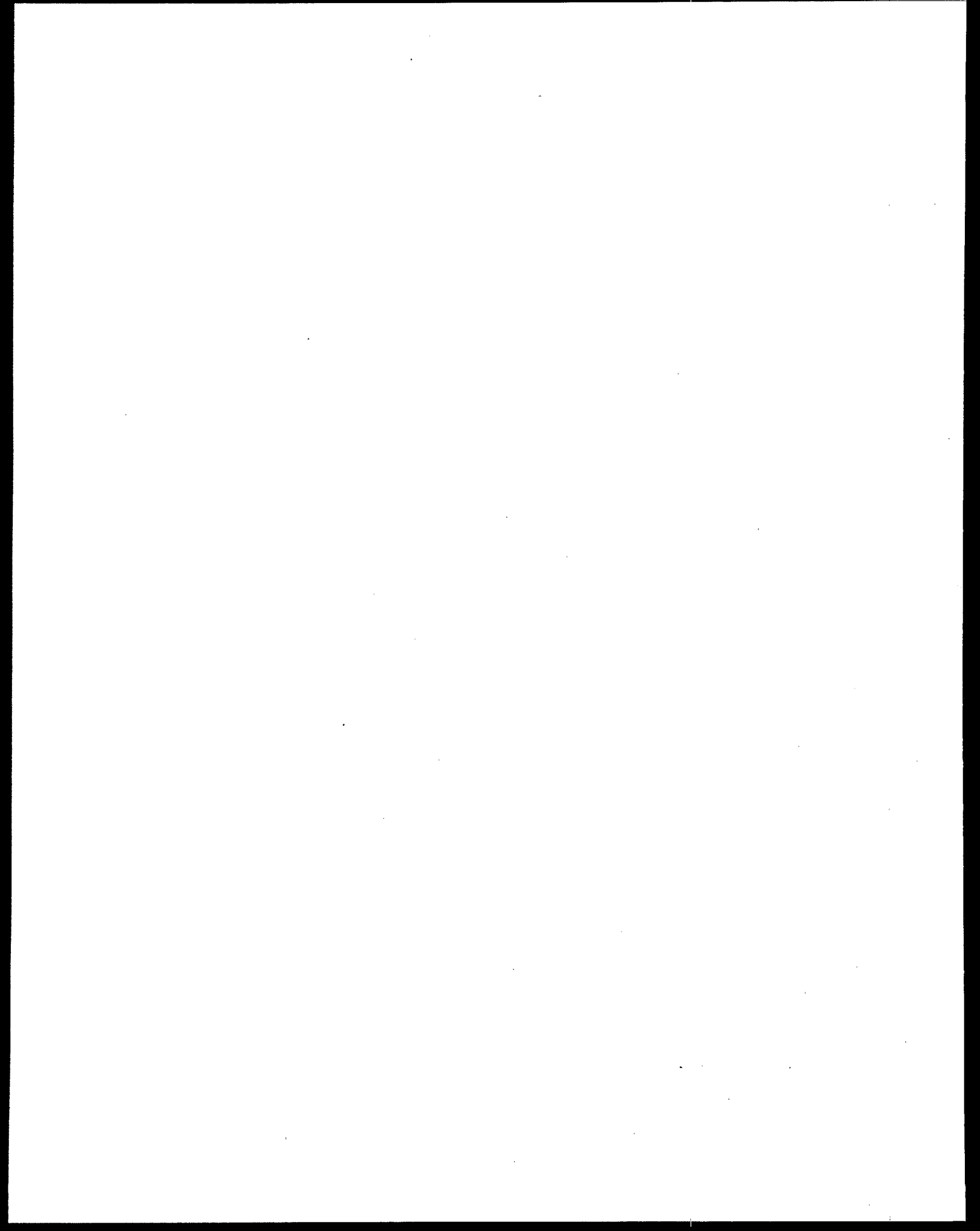
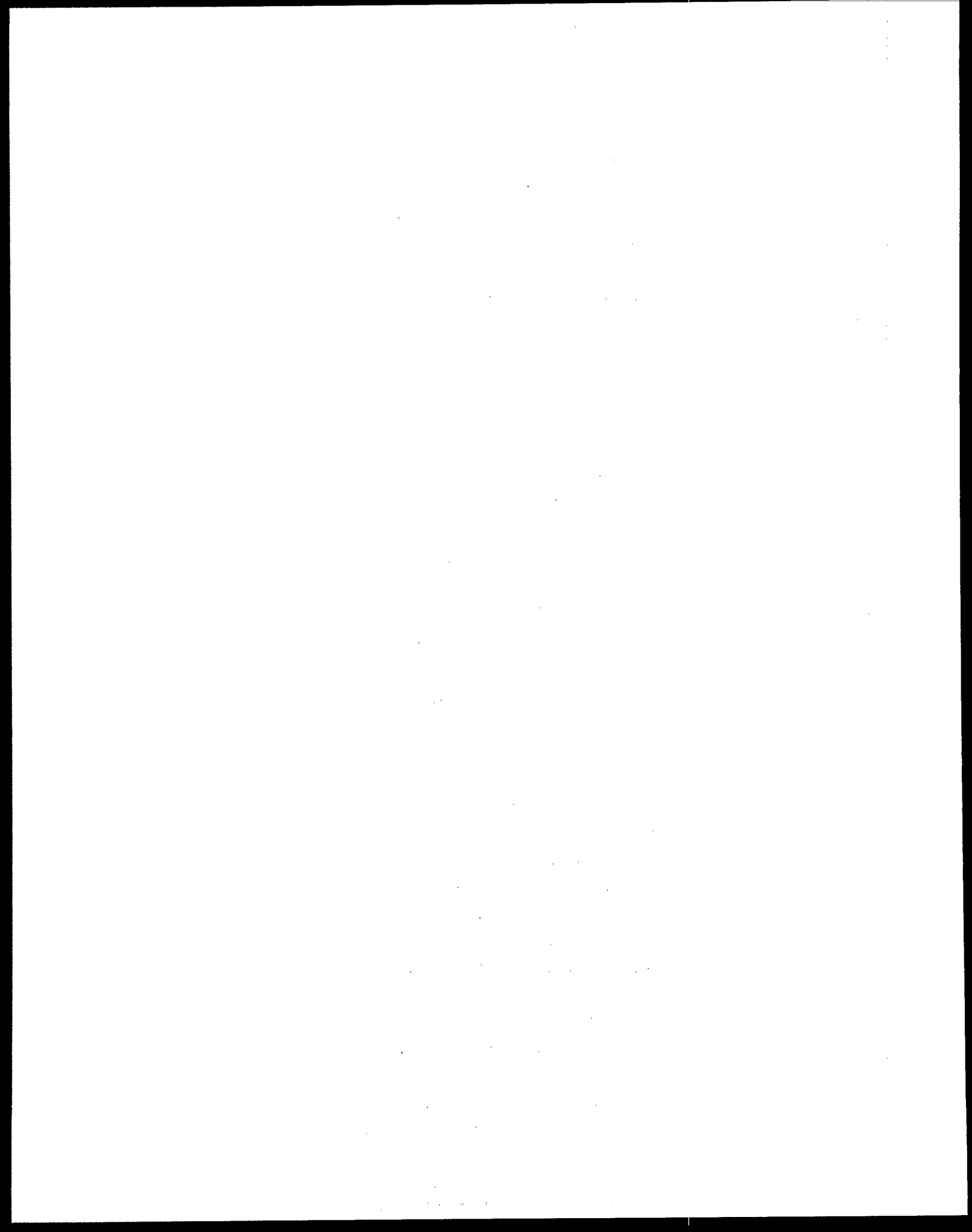


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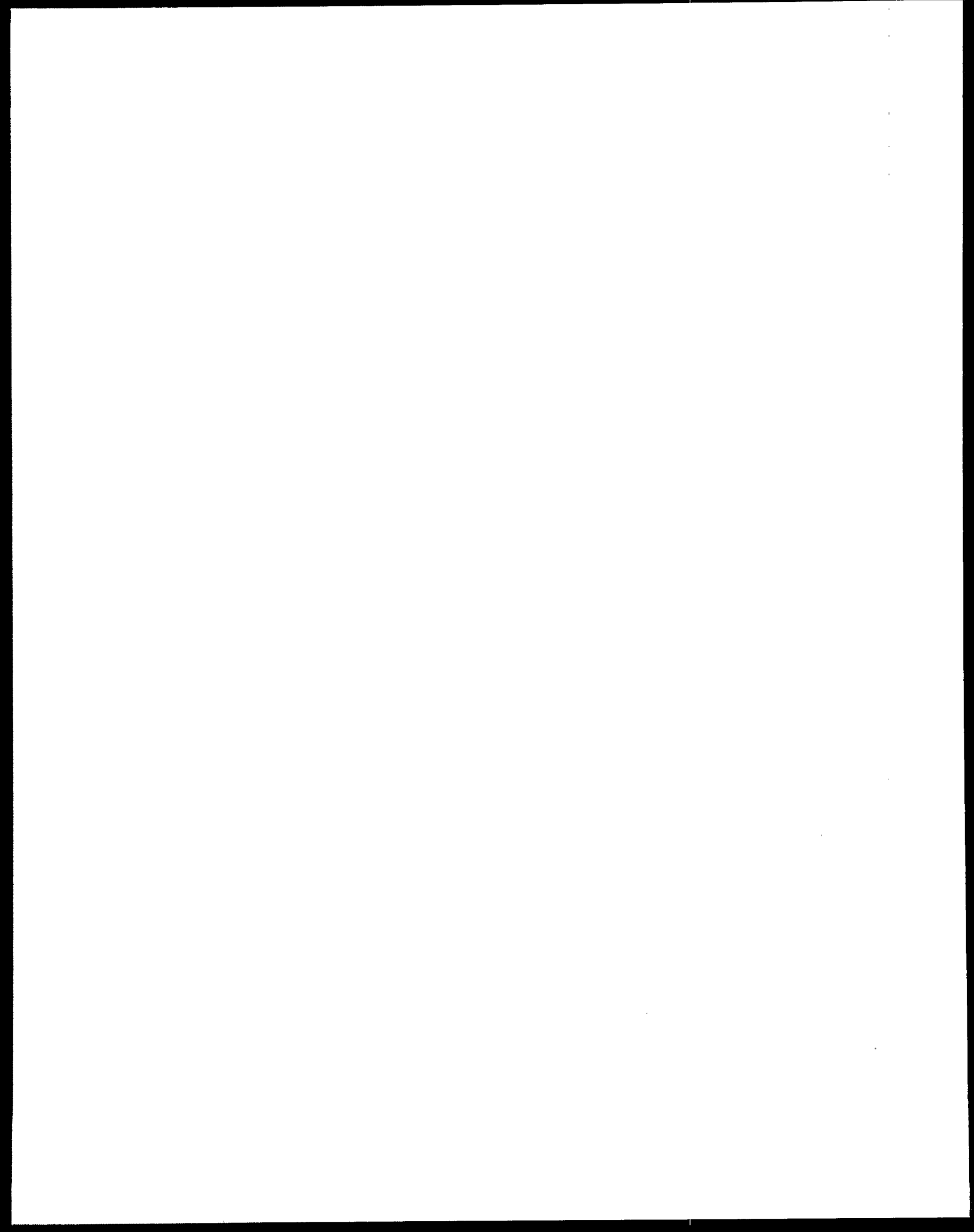


BACKGROUND

The U.S. Environmental Protection Agency (EPA) Office of Solid Waste and Emergency Response (OSWER) Technology Innovation Office (TIO) was created in 1990 to advocate the introduction, acceptance, and use of innovative technologies for the cleanup of Superfund sites. TIO's mission is to increase the application of innovative technologies for characterizing and cleaning up contaminated waste sites. Innovative technologies are having a significant positive effect on the cost, scheduling, and effectiveness of environmental cleanup projects. Innovative technologies have been demonstrated successfully at numerous Superfund and Resource Conservation and Recovery Act (RCRA) sites and should be incorporated into brownfields projects, as well. The potential cost savings and the ability to expedite decisions about site remediation are significant advantages to brownfields redevelopment projects. "Smart" technology choices that reduce the time or cost necessary to complete investigation and cleanup can help to make many sites more attractive for redevelopment and reuse.

The stakeholders involved in brownfields projects include city planners, real estate developers, consultants, citizens' groups, private and public interests groups, financial institutions, technology developers and vendors, EPA regional brownfields coordinators, and state and tribal brownfields coordinators. Many of those stakeholders may not have extensive experience with site assessment and cleanup activities and therefore may not be aware of the full range of technology options available to them. However, as they begin to make, review, and approve decisions about technologies chosen to investigate or clean up brownfields properties, it is essential that stakeholders understand the most cost-, time-, and environmentally effective options.

In 1998, TIO established the Brownfields Technology Support Center to assist brownfields localities and other stakeholders in assessing and using innovative technologies. The center provides assistance on site-specific issues, conducts general research of technologies, and prepares guidance and other information tools, including this directory of technology support services. Additional information about the center is available at <<<http://www.brownfieldstsc.org>>> or the center's toll free telephone number at 1-877-838-7220. Brownfields localities also can contact their EPA regional brownfields coordinators for information or assistance.



INTRODUCTION

This directory provides information about EPA offices, nongovernment organizations funded by EPA, and other federal agencies, that may be able to provide expertise to assist in the selection of technologies to characterize and clean up brownfields properties. The directory presents a profile of each entity that includes:

- Background and location information
- Information about sources of funding
- A description of the area(s) of expertise available
- A discussion of the types of services available
- Contact information, as well as information about how to obtain assistance

The directory also includes:

- A table that summarizes key information about the services described in the directory
- A list of documents that may be of interest to brownfields stakeholders
- A list of Web sites of other organizations that are involved in brownfields projects

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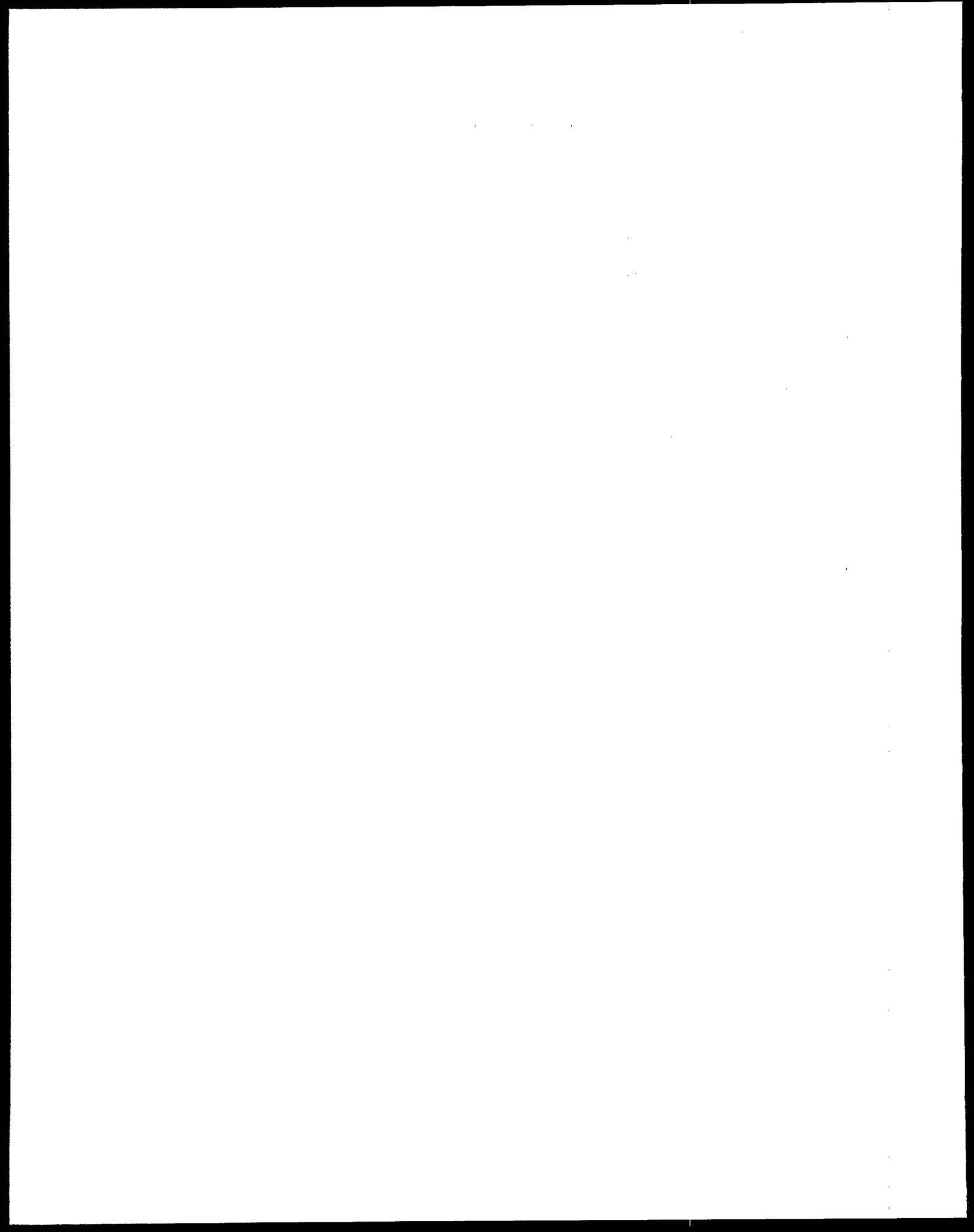
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LIST OF ACRONYMS

CERI	Center for Environmental Research Information
DoD	U.S. Department of Defense
DOE	U.S. Department of Energy
EPA	U.S. Environmental Protection Agency
EPA REACH IT	U.S. Environmental Protection Agency REmediation And CHaracterization Innovative Technologies Web Site
HSRC	Hazardous Substance Research Center
HTRW	Hazardous, toxic, and radioactive waste
ICMA	International City/County Management Association
IRM	Institute for Responsible Management
NAREL	National Air and Radiation Environmental Laboratory
NERL	National Exposure Research Laboratory
NPL	National Priorities List
NRMRL	National Risk Management Research Laboratory
ORD	Office of Research and Development
OSC	On-scene coordinator
OSWER	Office of Solid Waste and Emergency Response
PCB	Polychlorinated biphenyls
PTI	Public Technology, Inc.
RCRA	Resource Conservation and Recovery Act
RPM	Remedial project manager
STLP	Superfund Technical Liaison Program
STSC	Superfund Technical Support Centers
TAB	Technical Assistance to Brownfields
TIO	Technology Innovation Office
TOSC	Technical Outreach Services for Communities
TNT	Trinitrotoluene
TSP	Technical Support Project
USACE	U.S. Army Corps of Engineers
WRAP	Wetlands Regulatory Assistance Program



SUMMARY OF TECHNOLOGY SUPPORT SERVICES

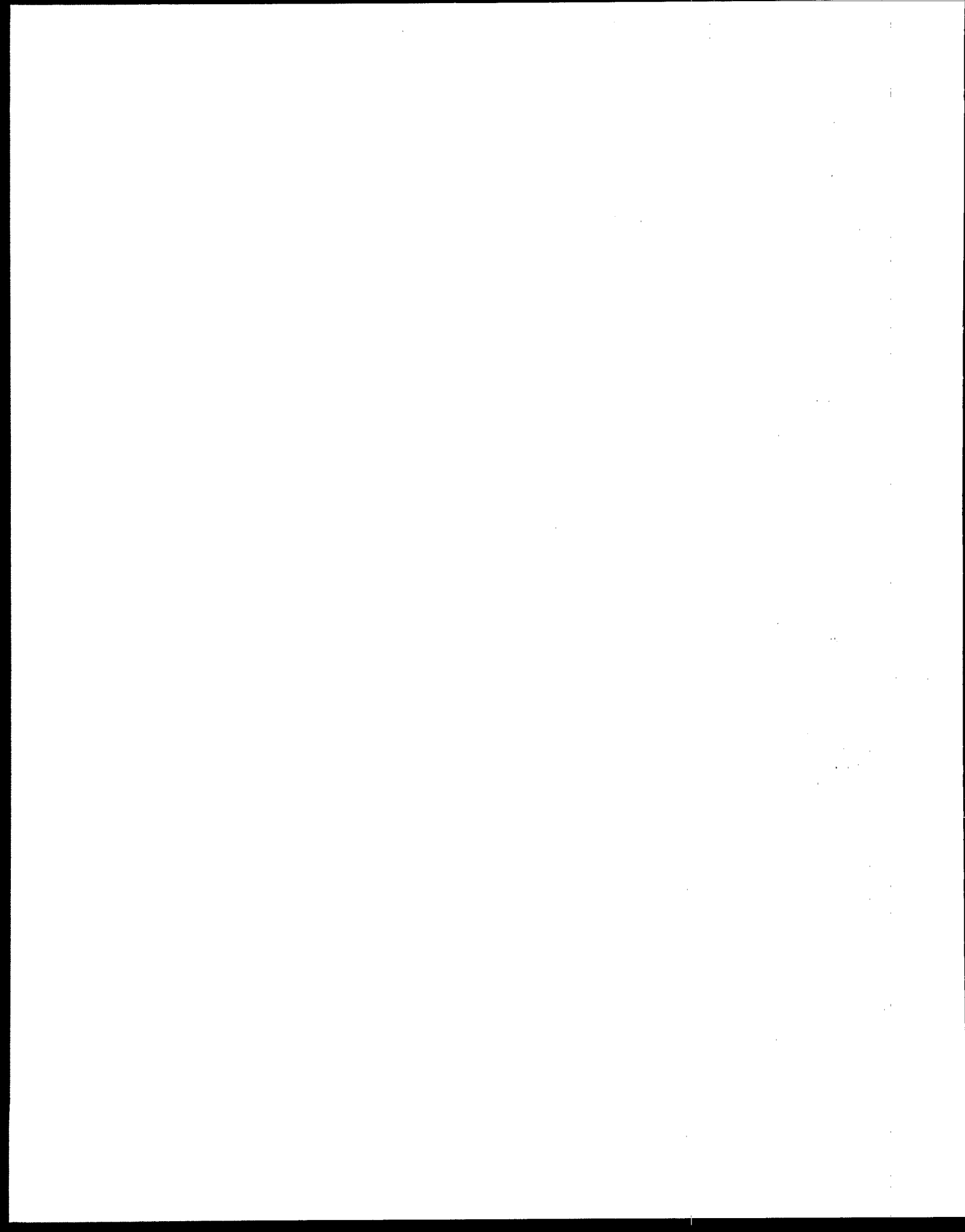
Name of Center	Location(s)	Speciality Area	Point(s) of Contact	Internet Home Page Address
EPA Brownfields Technology Support Center	Washington, D.C.	Innovative technologies	Dan Powell, EPA TIO (703) 603-7196 Carlos Pachon, EPA TIO (703) 603-9904 Art Glazer, Tetra Tech EM Inc. (703) 390-0623	http://clu-in.org/brownfieldstsc
	Las Vegas, Nevada		Ken Brown, NERL (702) 798-2270	
	Cincinnati, Ohio		David Reisman, NRMRL (513) 487-2588	
	Ada, Oklahoma		Jerry Jones, NRMRL (580) 436-8593	
EPA Regional Brownfields Coordinators	Boston, Massachusetts	Assist in the management of resources to provide support to brownfields projects	John Podgurski, Region 1 (617) 918-1209	http://www.epa.gov/swerosps/bf/regcntct.htm
	New York, New York		Larry D'Andrea, Region 2 (212) 637-4314	
	Philadelphia, Pennsylvania		Tom Stolle, Region 3 (215) 814-3129	
	Atlanta, Georgia		Mickey Hartnett, Region 4 (404) 562-8661	
	Chicago, Illinois		Joseph Dufficy, Region 5 (312) 886-1960	
	Dallas, Texas		Stan Hitt, Region 6 (214) 665-6736	
	Kansas City, Kansas		Susan Klein, Region 7 (913) 551-7786	
	Denver, Colorado		Kathie Atencio, Region 8 (303) 312-6803	
	San Francisco, California		Jim Hanson, Region 9 (415) 744-2237	
	Seattle, Washington		Timothy Brincefield, Region 10 (206) 553-2100	

SUMMARY OF TECHNICAL SUPPORT SERVICES (continued)

Name of Center	Location(s)	Speciality Area	Point(s) of Contact	Internet Home Page Address
EPA Center for Environmental Research Information (CERI)	Cincinnati, Ohio	Technology transfer	Daniel Murray (513) 569-7501 Susan Schock (513) 569-7551	http://www.epa.gov/ttnrmrl
U.S. Army Corps of Engineers (USACE)	38 full-service engineer districts located throughout the United States; primary points of contact located in Washington, D.C.	Site remediation and economic analysis of design and construction for reuse of brownfields	Bill Brasse (202) 761-8879 Jane Mergler (202) 761-5603 Greg Johnson (202) 761-0344 Jack Bickley (202) 761-8892	http://www.environmental.usace.army.mil/hq/programs/brownfields/brownfields.html
Hazardous Substance Research Centers	Newark, New Jersey (Northeast)	Technology transfer	Helen Gramcko (973) 596-5845	http://www.hsrc.org
	Baton Rouge, Louisiana (South/Southwest)	Contaminated sediment	Danny Reible (225) 388-6770	
	Ann Arbor, Michigan (Great Lakes/Mid-Atlantic)	Bioremediation	Walter Weber (313) 763-1464	
	Manhattan, Kansas (Great Plains/Rocky Mountain)	Contaminated soil	Larry Erickson (785) 532-2380	
	Stanford, California (West)	Site remediation	Perry McCarty (650) 723-4123	
Public Technology, Inc.	Washington, D.C.	Technology transfer	Ronda Mosley-Rovi (202) 626-2455 Steven Everett (202) 626-2421	http://brownfieldstech.org
Carnegie Mellon/University of Pittsburgh Brownfields Center	Pittsburgh, Pennsylvania	Geographic information systems	Deborah Lange (412) 268-7121	http://www.ce.cmu.edu/brownfields
Institute for Responsible Management	New Brunswick, New Jersey	Monitor activities at brownfields pilot projects	Chuck Powers (732) 296-1960	http://www.instrm.org/index.html

SUMMARY OF TECHNICAL SUPPORT SERVICES (continued)

Name of Center	Location(s)	Speciality Area	Point(s) of Contact	Internet Home Page Address
International City/County Management Association (ICMA) Brownfields/Superfund Research Consortium	Washington, D.C.	Facilitate information exchange among local governments	David Borak (202) 962-3506	http://www.icma.org/abouticma/ programs/sbri.cfm
Brownfields Non-Profits Network	Various	Resource center	Various	http://www.brownfieldsnet.org/



1.0 EPA BROWNFIELDS TECHNOLOGY SUPPORT CENTER

Background:	<p>Coordinated through EPA OSWER's TIO, the Brownfields Technology Support Center ensures that brownfields decision makers are aware of the full range of technologies available and are able to make "smart" technology decisions for their sites. The center provides a readily accessible resource for unbiased assessments and supporting information about options relevant to specific sites. The center also will provide a technology-oriented process for reviewing cleanup plans for those sites.</p> <p>The center works through EPA Office of Research and Development (ORD) laboratories in Cincinnati, Ohio; Ada, Oklahoma; and Las Vegas, Nevada to provide the expertise and information necessary to help brownfields decision makers determine whether innovative options are available and feasible for their sites.</p>
Location:	EPA Headquarters, Washington, D.C.
Source of Funding:	EPA
Speciality Areas:	<p>Each of the three laboratories provide expertise related to various speciality areas that include:</p> <ul style="list-style-type: none"> • National Exposure Research Laboratory (NERL), Las Vegas, Nevada <ul style="list-style-type: none"> - site characterization technologies and monitoring • National Risk Management Research Laboratory (NRMRL), Ada, Oklahoma <ul style="list-style-type: none"> - groundwater remediation • NRMRL, Cincinnati, Ohio <ul style="list-style-type: none"> - engineering research and development
General Services Offered:	<ul style="list-style-type: none"> • Reviews of documents • Technology scoping for site assessment or investigation technologies and for cleanup technologies • Descriptions of technologies • Reviews of literature and electronic resources • Support for demonstrations
Process for Requesting Assistance:	Localities can submit requests through their EPA regional brownfields coordinators. In addition, localities can submit requests through the Internet at << http://clu-in.org/brownfieldstsc >> or by calling the center's toll free telephone number at 1 (877) 838-7220.
Points of Contact:	<p>Dan Powell, EPA TIO (703) 603-7196 or powell.dan@epa.gov Carlos Pachon, EPA TIO (703) 603-9904 or pachon.carlos@epa.gov Ken Brown, NERL, Las Vegas (702) 798-2270 or brown.ken@epa.gov David Reisman, NRMRL, Cincinnati (513) 487-2588 or reisman.david@epa.gov Jerry Jones, NRMRL, Ada (580) 436-8593 or jones.jerry@epa.gov Art Glazer, Tetra Tech EM Inc. (support contractor) (703) 390-0623 or glazera@ttemi.com</p>
Internet Home Page:	<< http://clu-in.org/brownfieldstsc >>

1.1 RESOURCES AVAILABLE TO EPA STAFF

Background:	<p>Additional resources at EPA are available to staff of EPA to assist brownfields localities. Those resources include:</p> <ul style="list-style-type: none"> • EPA Superfund Technical Liaison Program (STLP): In 1990, EPA ORD and OSWER created the STLP to expand the technical support available to regional Superfund staff. ORD assigns senior scientists and engineers to serve as technical liaisons, who are located in EPA regional hazardous waste program offices. • EPA Technical Support Project (TSP): EPA OSWER, ORD, and regional waste management offices established the TSP in 1987 to provide technical assistance to regional remedial project managers (RPM) and on-scene coordinators (OSC). The project consists of a network of regional forums, specialized technical centers located in ORD laboratories, and OSWER's environmental response team. The technical centers and forums include: <ul style="list-style-type: none"> – EPA Superfund Technical Support Centers (STSC): The objectives of the STSC include providing technical support and assistance to regional staff, improving communications among EPA regional offices and ORD laboratories, and ensuring coordination and consistency in the application of remedial technologies. In addition, the centers may provide support for issues related to brownfields at non-NPL sites through the Brownfields Technology Support Center described in section 1.0 of this directory. – EPA Regional Forums: EPA regional technical personnel have established three forums within TSP, the Engineering Forum, the Ground Water Forum, and the Federal Facilities Forum. Each of the forums work to improve communications and assist in technology transfer between the regional offices and the STSCs. The forums also serve as technical resources and distribute information developed by the TSP. Members of the forums meet semiannually to discuss technical and policy issues, new technologies and to network with other federal agencies.
Location:	<p>STLP: Most EPA regional offices</p> <p>STSCs:</p> <ul style="list-style-type: none"> • NERL, Las Vegas, Nevada • NRMRL, Cincinnati, Ohio • NRMRL, Ada, Oklahoma • National Center for Environmental Assessment, Cincinnati, Ohio • National Air and Radiation Environmental Laboratory (NAREL), Montgomery, Alabama <p>Regional Forums:</p> <ul style="list-style-type: none"> • Engineering Forum • Ground Water Forum • Federal Facilities Forum
Process for Requesting Assistance:	<p>Localities can submit requests through their brownfields coordinators. Section 2.0 of this directory provides a list of brownfields coordinators for each regional office.</p>
Internet Home Page:	<p>TSP: <<http://www.clu-in.org/tsp/tscs.htm>></p>

2.0 EPA REGIONAL BROWNFIELDS COORDINATORS

Background:	Each EPA regional office has identified a central point of contact responsible for receiving and disseminating information about the region's brownfields activities.
Location:	Each EPA regional office
Source of Funding:	EPA
Areas of Expertise:	Each EPA regional office has assembled a team of brownfields coordinators to work with the pilot projects that have been awarded in that region. Those individuals have extensive experience in the Superfund and RCRA programs, in site characterization and remediation, and selection and use of innovative technologies. Some members of the regional brownfields teams also are former RPMs, OSCs, and site assessment managers.
Process for Requesting Assistance:	Contact the individuals listed below.
Points of Contact:	<p>John Podgurski, EPA Region 1 (617) 918-1209 or podgurski.john@epa.gov Larry D'Andrea, EPA Region 2 (212) 637-4314 or dandrea.larry@epa.gov Tom Stolle, EPA Region 3 (215) 814-3129 or stolle.tom@epa.gov Michael Hartnett, EPA Region 4 (404) 562-8661 or hartnett.y@epa.gov Joseph Dufficy, EPA Region 5 (312) 886-1960 or dufficy.joseph@epa.gov Stanley Hitt, EPA Region 6 (214) 665-6736 or hitt.stanley@epa.gov Susan Klein, EPA Region 7 (913) 551-7786 or klein.susan@epa.gov Kathie Atencio, EPA Region 8 (303) 312-6803 or atencio.kathie@epa.gov James Hanson, EPA Region 9 (415) 744-2237 or hanson.jim@epa.gov Timothy Brincefield, EPA Region 10 (206) 553-2100 or brincefield.timothy@epa.gov</p>
Internet Home Page:	<< www.epa.gov/swerosps/bf/regcntct.htm >> (Lists the entire Brownfields team for each region.)

3.0 EPA NATIONAL CENTER FOR ENVIRONMENTAL RESEARCH INFORMATION	
Background:	EPA CERI serves as the focal point at EPA ORD for the dissemination of scientific and technical information to the public and other government agencies. CERI is responsible for planning, coordinating, reviewing, and conducting a comprehensive program to distribute recent advancements in risk management approaches for use by regulated industry; regulatory and permitting officials; and the environmental consulting community. Among its products are technical and nontechnical publications, software products, and technical meetings to inform stakeholders of the results of research conducted by EPA and other organizations.
Location:	Cincinnati, Ohio
Source of Funding:	EPA
Speciality Areas:	<p>CERI can provide support in the following areas:</p> <ul style="list-style-type: none"> • Watershed management, infrastructures, and decentralized wastewater systems • Biosolids and urban wet weather • Ecosystem restoration • Drinking water treatment optimization • Hazardous waste remediation particularly innovative treatment technologies • Brownfields sustainability • Risk communication, children's health, and persistent bioaccumulative toxics • Pollution prevention
General Services Offered:	<p>CERI has experience providing the following services:</p> <ul style="list-style-type: none"> • Technical assistance • Workshops and seminars • Guidance documents and technical resources
Process for Requesting Assistance:	Localities can submit requests directly to the points of contact listed below.
Points of Contact:	<p>Daniel Murray, Chief (513) 569-7551</p> <p>For brownfields related assistance: Sue Schock (513) 569-7551</p>
Internet Home Page:	<< http://www.epa.gov/ttnrmrl >>

4.0 U.S. ARMY CORPS OF ENGINEERS

Background:	Through its traditional water resources development program, its "support for others" program and, its military program, USACE provides engineering, construction, water resources, and environmental management services for public sector clients (such as other federal agencies, states, and municipalities). Experienced in collaborative actions and adept at helping municipalities identify federal resources and integrate the "federal team" into an effort, USACE has the capacity to expand partnerships. Under its integrated approach, USACE seeks more comprehensive solutions to such issues as urban watersheds, revitalization of infrastructure, water supply, combined sewer overflows, environmental restoration, cleanup of hazardous waste, and other issues that affect reuse of brownfields. USACE has established a network of brownfields specialists throughout the country. The Internet home page listed below identifies district-level points of contact. In addition, USACE has two centers that are described in sections 6.1 and 6.2 of this directory.
Members or Location:	<ul style="list-style-type: none"> • District-level brownfields support staff at various locations throughout the United States • Hazardous, Toxic, and Radioactive Waste Center of Expertise, Omaha, Nebraska • Waterways Experiment Station Environmental Laboratory, Vicksburg, Mississippi • Construction Engineering Research Laboratory, Champaign, Illinois
Source of Funding:	Congressional appropriations and the U.S. Department of Defense (DoD), and other federal agencies
Speciality Areas:	<ul style="list-style-type: none"> • Planning assistance • Site assessment • Remedial design and construction • Economic analysis of design and construction alternatives for the reuse of brownfields • Rapid-response removal of hazardous, toxic, and radioactive waste (HTRW) • Habitat restoration • Contract administration • Project management
General Services Offered:	<p>USACE has experience in all aspects of:</p> <ul style="list-style-type: none"> • Site assessment • Site remediation • Sustainable reuse
Process for Requesting Assistance:	Localities can submit requests to the point of contact listed below.
Point of Contact:	Bill Brasse, Headquarters Brownfields Coordinator (202) 761-8879
Internet Home Page:	<< http://www.environmental.usace.army.mil/hq/programs/brownfields/brownfields.html >>

4.1 USACE HAZARDOUS, TOXIC, AND RADIOACTIVE WASTE CENTER OF EXPERTISE	
Background:	The USACE Hazardous Toxic, and Radioactive Waste Center of Expertise focuses on environmental remediation and other environmental compliance issues.
Location:	Omaha, Nebraska
Speciality Areas:	Innovative technologies
General Services Offered:	<p>The center can provide support in the following areas nationwide:</p> <ul style="list-style-type: none"> • Compliance: environmental regulation and laws • Environmental and ecological risk assessment • Health and safety • Chemical, environmental, and geotechnical engineering • Geology • Chemistry • Health physics • Contracting • Cost recovery • Review of project documents • Technology transfer • Discipline-specific technical assistance • Training • Development of guidance documents • Site visits
Point of Contact:	Johnnie Shockley (402) 697-2558
Internet Home Page:	<< http://www.environmental.usace.army.mil/ >>

4.2 USACE WATERWAYS EXPERIMENT STATION ENVIRONMENTAL LABORATORY

Background:	The USACE Waterways Experiment Station Environmental Laboratory is the primary research, testing, and development facility of USACE. Its mission is to conceive, plan, study, and execute engineering investigations and research and development studies.
Location:	Vicksburg, Mississippi
Speciality Areas:	<ul style="list-style-type: none">• Dredging (Center for Contaminated Sediments)• Cultural preservation (Center for Cultural Site Preservation Technology)• Ecosystem modeling• Environmental information analysis• Environmental modeling simulation and research<ul style="list-style-type: none">- land modeling, dredged material and disposal computer modeling, water quality modeling• Long-term effects of dredging operations• Biotreatment• Characterization and monitoring of ecosystems• Phytoremediation• Threatened and endangered species• Water quality• Wetlands• Technical support for dredging operations• Conservation assistance program• Wetlands Regulatory Assistance Program (WRAP)
General Services Offered:	<p>The laboratory can provide the following services nationwide:</p> <ul style="list-style-type: none">• Technical and regulatory assistance• Workshops, training opportunities, and seminars• Technology transfer• Research and development related to contaminated sediments
Point of Contact:	John Keeley, Acting Director (601) 634-3477
Internet Home Page:	<< http://www.wes.army.mil/el/centers.html >>

4.3 USACE CONSTRUCTION ENGINEERING RESEARCH LABORATORY	
Background:	The USACE Construction Engineering Research Laboratory, established in 1969, researches and develops methods and technology aimed at increasing the efficient construction and the operation and maintenance of facilities (buildings), while ensuring environmental quality and safety at a reduced life-cycle cost.
Members or Location:	Champaign, Illinois
Specialty Areas:	Development of infrastructure and environmental sustainment technologies.
General Services Offered:	<p>The laboratory can provide the following services nationwide:</p> <p>Revitalization of facilities:</p> <ul style="list-style-type: none"> • Seismic evaluation and rehabilitation for facilities • Redesign of facility delivery processes • Enduring building systems • Advanced infrastructure materials systems • Green building design <p>Operations</p> <ul style="list-style-type: none"> • Operation, maintenance, and repair technologies • Energy <p>Conservation</p> <ul style="list-style-type: none"> • Management of threatened and endangered species • Erosion control • Land use planning • Archeological resources • Historical structures
Point of Contact:	Michael J. O'Connor, Director (217) 373-6714
Internet Home Page:	<< http://www.cecer.army.mil/ >>

5.0 NONGOVERNMENT ORGANIZATIONS (TECHNICAL)

The nongovernment organizations described in this section have been established to provide a national program of basic and applied research, technology transfer, training, and outreach.

5.1 HAZARDOUS SUBSTANCE RESEARCH CENTERS

Background:	EPA has established the Hazardous Substance Research Centers (HSRC) program to develop better, cheaper, faster, and safer methods of assessing and cleaning up hazardous substances. HSRCs conduct their activities on a regional basis through five multiuniversity centers that focus on different aspects of the management of hazardous substances. The centers bring together researchers representing a variety of disciplines to collaborate on integrated research projects, involving both immediate practical problems of hazardous substance management and long-term exploratory research.
Members or Location:	<ul style="list-style-type: none"> • The Northeast HSRC at the New Jersey Institute of Technology • The South/Southwest HSRC at Louisiana State University • The Great Lakes/Mid-Atlantic HSRC at the University of Michigan • The Great Plains/Rocky Mountain HSRC at Kansas State University • The Western Region HSRC at Stanford University
Source of Funding:	The HSRCs were established competitively and are funded primarily by EPA, with additional funding from the Department of Energy (DOE) and DoD. The program also receives funding from academia, private industry, and other state and federal government agencies.
Speciality Areas	Research, technology transfer, and training
General Services Offered:	<ul style="list-style-type: none"> • Provide the technical Outreach Services For Communities (TOSC) Program, a no-cost, nonadvocacy technical assistance program that has guided numerous communities through the environmental cleanup and site reuse process and: <ul style="list-style-type: none"> - Answers questions about potential health effects and possible cleanup technologies for hazardous waste sites - Assists members of communities in becoming active participants in the decision-making process involved in cleaning up hazardous environments - Sponsors community workshops and provides educational material about human health, environmental risks, and regulatory concerns • Provide the Technical Assistance to Brownfields (TAB) Program, which provides technical assistance and training to communities • Review and interpret technical documents and other materials • Sponsor workshops, short courses, and other learning experiences to explain basic science and environmental policy • Provide information to community members about existing technical assistance materials, such as publications, videos, and Web sites • Train community leaders in leadership and facilitation • Provide technical assistance materials tailored to the identified needs of a community in which brownfields properties are located
Process for Requesting Assistance:	Localities can submit requests through the centers identified in sections 4.1 through 4.5 of this directory.
Point of Contact:	Dale Manty, Program Director (202) 564-6922 or manty.dale@epa.gov
Internet Home Page:	<< http://www.hsrb.org >>

5.1.1 The Northeast HSRC	
Background:	The Northeast HSRC was established in 1989 to conduct basic and applied research, technology transfer, and training in EPA regions 1 and 2. The Northeast HSRC's research agenda reflects the attributes of regions 1 and 2, including its aging industrial base, dense population, economic activity, high concentration of chemical and pharmaceutical industries, and rapidly developing base of high-technology industry. Another factor that shapes the center's research focus is the large number of sites in the two regions that are on the National Priorities List (NPL) and that are affected by groundwater contamination.
Members or Location:	The New Jersey Institute of Technology, the Massachusetts Institute of Technology, Princeton University, Rutgers University, the Stevens Institute of Technology, Tufts University, and the University of Medicine and Dentistry of New Jersey
Speciality Areas	Technology transfer and application of innovative technologies
General Services Offered:	Development and demonstration of treatment and remediation technologies in four areas: <ul style="list-style-type: none"> • Incineration and thermal treatment • Site characterization and monitoring • In-situ remediation • Ex-situ treatment processes
Point of Contact:	Helen Gramcko (973) 596-5845
Internet Home Page:	<< http://www.cees.njit.edu/nhsrc/ >>

5.1.2 The South/Southwest HSRC

Background:	The South/Southwest HSRC, established in 1991, conducts research and technology transfer activities designed to promote risk-based management and control of hazardous substances for EPA regions 4 and 6. This HSRC focuses its efforts on contaminated sediments and dredged materials that contain organic contaminants, metals, and conventional pollutants.
Members or Location:	Louisiana State University, the Georgia Institute of Technology, and Rice University
Speciality Areas:	Contaminated sediment
General Services Offered:	<p>Remediation of contaminated sediments and dredged materials, with projects focused on:</p> <ul style="list-style-type: none"> • In-situ chemical mobilization processes in beds and confined disposal facilities • In-situ remediation • In-situ detection <p>Research theme areas include:</p> <ul style="list-style-type: none"> • Availability of contaminants in sediments • Biotransformation processes of contaminants in sediments • Science of risk management for sediments • Regional issues related to hazardous substances
Point of Contact:	Danny D. Reible, Director (225) 388-6770
Internet Home Page:	<< http://www.hsrb.org/hsrc/html/south.html >>

5.1.3 Great Lakes/Mid-Atlantic HSRC

Background:	The Great Lakes/Mid-Atlantic HSRC, established in 1989, supports EPA regions 3 and 5 in addressing crucial issues related to hazardous substances. The center's efforts focus on the development and application of bioremediation technologies for contaminated soils and groundwater. Current research projects include studies of soil contaminant sorption, desorption, and sequestration properties.
Members or Location:	University of Michigan, Michigan State University, and Howard University
Speciality Areas:	Bioremediation
General Services Offered:	<ul style="list-style-type: none"> • Improving understanding of fundamental processes of in-situ bioremediation • Distributing videos and publications about bioremediation
Point of Contact:	Walter J. Weber, Director (313) 763-1464
Internet Home Page:	<< http://www.engin.umich.edu/dept/cee/research/HSRC/index.html >>

5.1.4 The Great Plains/Rocky Mountain HSRC	
Background:	The Great Plains/Rocky Mountain HSRC, established in 1989, serves EPA regions 7 and 8. The center conducts research pertaining to hazardous substances produced through agriculture, forestry, mining, mineral processing, and other activities.
Members or Location:	Haskell Indian Nations University, Kansas State University, Lincoln University, Montana State University, South Dakota State University, the University of Iowa, the University of Missouri, the University of Montana, the University of Nebraska, the University of Utah, the University of Wyoming, Utah State University, Colorado State University, and the University of Northern Iowa
Speciality Areas:	Contaminated soils and mining wastes
General Services Offered:	<p>Remediation of contaminated soils and mining wastes, with specific research interests that include:</p> <ul style="list-style-type: none"> • Soil and water contaminated with heavy metals • Soil and groundwater contaminated by organic chemicals • Wood preservatives that contaminate groundwater • Pesticides identified as hazardous substances • Improved technologies and methods of characterizing and analyzing contaminated soil • Methods of and technologies for waste minimization and pollution prevention • Phytoremediation
Point of Contact:	Larry Erickson, Director (785) 532-2380
Internet Home Page:	<< http://www.engg.ksu.edu/HSRC/home.html >>

5.1.5 Western Region HSRC

Background:	The Western Region HSRC, established in 1989, serves EPA regions 9 and 10. The objectives of the center are: (1) to promote the development of alternative and advanced physical, chemical, and biological processes for treatment of hazardous substances; (2) to disseminate the results of research to the industrial and regulatory communities; and (3) to promote a better understanding of the scientific capability to detect, assess, and mitigate risks associated with the use and disposal of hazardous substances. Groundwater cleanup and site remediation, with a strong emphasis on biological approaches, represent the major focus of the center's activities.
Members or Location:	Stanford University and Oregon State University
Speciality Areas:	Site remediation accomplished by biological approaches
General Services Offered:	Research focuses on groundwater cleanup and site remediation, including: <ul style="list-style-type: none">• Chlorinated and nonchlorinated solvents• Halogenated aromatic compounds such as pentachlorophenol and polychlorinated biphenyls (PCB)• Nonhalogenated aromatics including petroleum derivatives• Ordnance wastes, such as trinitrotoluene (TNT)• Heavy metals• Evaluation of factors that affect the transport and fate of the above chemicals in the environment• Design and management issues for site remediation
Point of Contact:	Perry McCarty, Director (650) 723-4123
Internet Home Page:	<< http://www-seep-server.stanford.edu/SEEPWeb/wrsrc/ >>

6.0 NONGOVERNMENT ORGANIZATIONS (INFORMATION)

Although the organizations may not provide direct "technical" support, they are included in the directory listed below as additional sources of information for brownfields localities. The organizations perform the work described with funding from EPA.

6.1 PUBLIC TECHNOLOGY, INC.

Background:	<p>In 1998, Public Technology, Inc. (PTI) entered into a cooperative agreement with EPA TIO to focus on the outreach of development, demonstration, and promotion of innovative characterization and remediation technologies for local governments. PTI was selected as a partner in the effort primarily for three reasons:</p> <ul style="list-style-type: none">• PTI's membership: an extensive national network of local government officials allows PTI to reach technology decision makers at the local level• PTI's 27 year track record of testing, promoting, and commercializing technology through its networks• PTI's ability to work closely with its sponsoring organizations, The National League of Cities, the National Association of Counties, and the International City/County Management Association (ICMA), which provide PTI with its policy direction and which, working with PTI, reach more than 39,000 units of local government.
Location:	Washington, D.C.
Source of Funding:	EPA
Speciality Areas:	Outreach and promotion of innovative characterization and remediation technologies
General Services Offered:	PTI provides an Internet home page to keep elected and appointed officials of local government and their professional, scientific, and technical staff up-to-date on innovations in the development and application of brownfields remediation technologies. The information can assist local governments in increasing efficiencies and reducing costs associated with reclamation and redevelopment of brownfields.
Process for Requesting Assistance:	Localities can contact the individuals listed below.
Points of Contact:	Ronda Mosely-Rovi, Director, Environmental Programs (202) 626-2455 or mosley-rovi@pti.mw.dc.us Steven Everett, Brownfields Coordinator (202) 626-2421 or webmanager@brownfieldstech.org
Internet Home Page:	<< http://brownfieldstech.org >>

6.2 CARNEGIE MELLON/UNIVERSITY OF PITTSBURGH BROWNFIELDS CENTER	
Background:	The Carnegie Mellon/University of Pittsburgh Brownfields Center attempts to improve the brownfields revitalization process by enabling scholars in engineering, the social sciences, economics, and the arts to develop a comprehensive, multilevel understanding of the challenges community leaders face as they seek to return brownfields to productive use. By applying interdisciplinary research teams to all levels of the process, the center develops a collection of prototype decision support systems and distributes them to those working in brownfields redevelopment.
Location:	Pittsburgh, Pennsylvania
Source of Funding:	The University of Pittsburgh and Carnegie Mellon University and EPA
Speciality Areas:	Geographic information systems and information technology
General Services Offered:	<ul style="list-style-type: none"> • Analysis of community perceptions of brownfields projects • Measurement of the costs and benefits of brownfields projects • Analysis of issues related to waterfront development • Analysis of issues related to transportation
Process for Requesting Assistance:	Localities can submit requests to the point of contact below.
Point of Contact:	Deborah Lange, Director (412) 268-7121 or dlange@andrew.cmu.edu
Internet Home Page:	<< http://www.ce.cmu.edu/brownfields/ >>

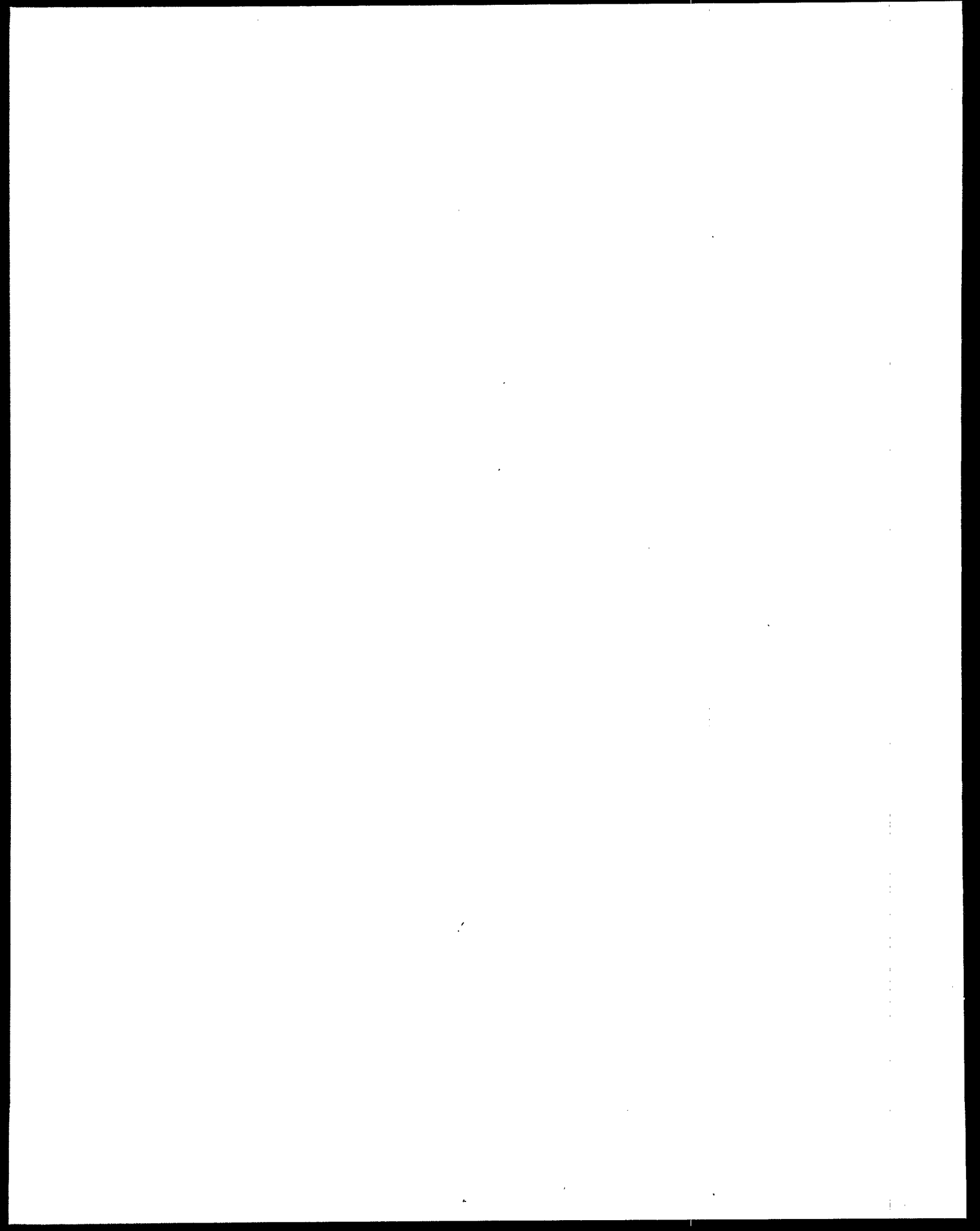
6.3 INSTITUTE FOR RESPONSIBLE MANAGEMENT	
Background:	The Institute for Responsible Management (IRM) is a nonprofit 501 (c)(3) organization chartered to foster collaboration and cooperation between the public and private sectors on public policy issues related, but not limited, to environmental, public safety, and health concerns. For the past three years, IRM has been involved integrally in working with EPA brownfields pilot communities to show that cleanup and reuse strategies can be identified through coordination of local initiatives.
Location:	New Brunswick, New Jersey
Source of Funding:	EPA provides support to IRM for the conduct of research and the dissemination of information about its findings.
Speciality Areas:	Collecting and disseminating information
General Services Offered:	IRM maintains a database of products, programs, models, and tasks identified by each responding pilot program as components of its overall brownfields strategy. Brownfields pilot programs were asked to provide a brief description of each product, program, model, or task; indicate the status of its progress; and identify the appropriate contacts from whom additional information is available.
Process for Requesting Assistance:	Localities can submit requests to the point of contact listed below.
Point of Contact:	Chuck Powers, President (732) 296-1960, or cwpowers@instrm.org
Internet Home Page:	<< www.instrm.org/index.html >>

6.4 INTERNATIONAL CITY/COUNTY MANAGEMENT ASSOCIATION

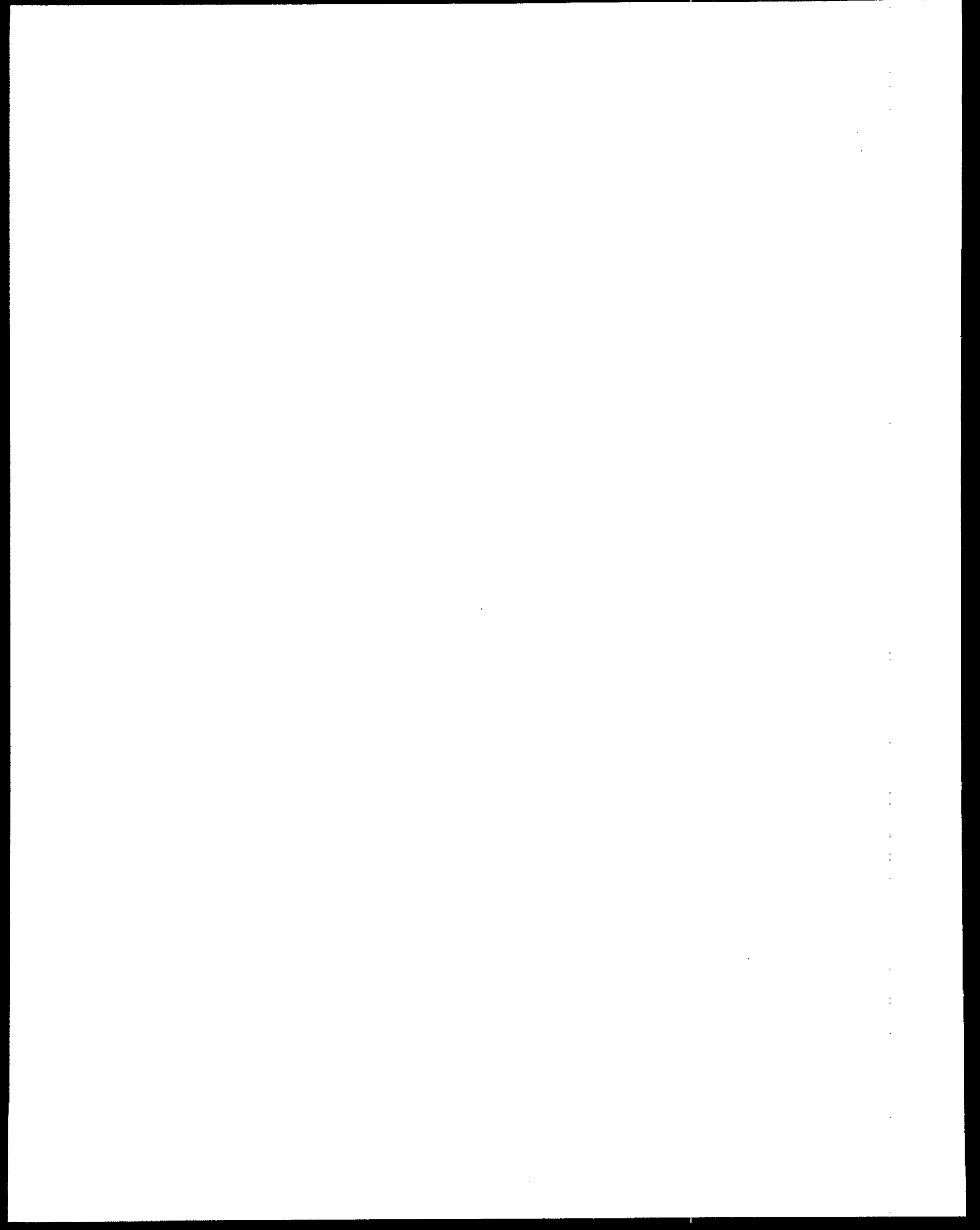
Background:	ICMA sponsors, develops, and implements a number of programs that provide managers and administrators in local governments with expertise on a variety of topics. One area in which ICMA can offer expertise is the Brownfields/Superfund Consortium, which helps local governments address the financial, legal, technical, and public health concerns associated with brownfields and Superfund sites. Membership in the consortium is not sold to individuals, but rather to cities or counties. Dues are based on population. The benefits of membership include opportunities for dialogue with EPA, Congress, and industry and access to information, resources and technical assistance from other members and ICMA staff.
Location:	Washington, D.C.
Source of Funding:	ICMA receives funding from EPA to help support the Brownfields/Superfund Consortium.
Speciality Areas:	Information and networking
General Services Offered:	<ul style="list-style-type: none"> • Generate strategies or initiatives to solve problems related to brownfields • Conduct collaborative research and development on brownfields topics
Point of Contact:	David Borak (202) 962-3506
Internet Home Page:	<< http://www.icma.org/ >>

6.5 BROWNFIELDS NON-PROFITS NETWORK

Background:	The Brownfields Non-Profits Network is a network of nonprofit organizations that help to promote the redevelopment of brownfields properties throughout the United States. The network's Internet home page can assist community groups and other organizations in finding out more about what they can do with abandoned contaminated sites and where they can obtain help in their efforts.
Members or Location:	Members include such organizations as the National Brownfields Association, the Council for Urban Economic Development, and the Center for Land Renewal.
Source of Funding:	The Center for Land Renewal, with support from the Howard H. and Vira I. Heinz Foundation
Speciality Areas:	Information resource
Points of Contact:	Tom Colangelo, National Brownfields Association (847) 870-8208 or bfnews@flash.net Ed Gilliland, Council for Urban Economic Development (202) 223-4735
Internet Home Page:	<< http://www.brownfieldsnet.org/ >>



APPENDIX A
OTHER RESOURCES



OTHER RESOURCES

EPA, ORD. 1998. Cost Estimating Tools and Resources for Addressing Sites Under the Brownfields Initiative, EPA/625/R-99/001. April.

EPA, ORD. 1999. Technical Approaches to Characterizing and Cleaning Up Automotive Repair Sites Under the Brownfields Initiative, EPA/625/R-98/008. February.

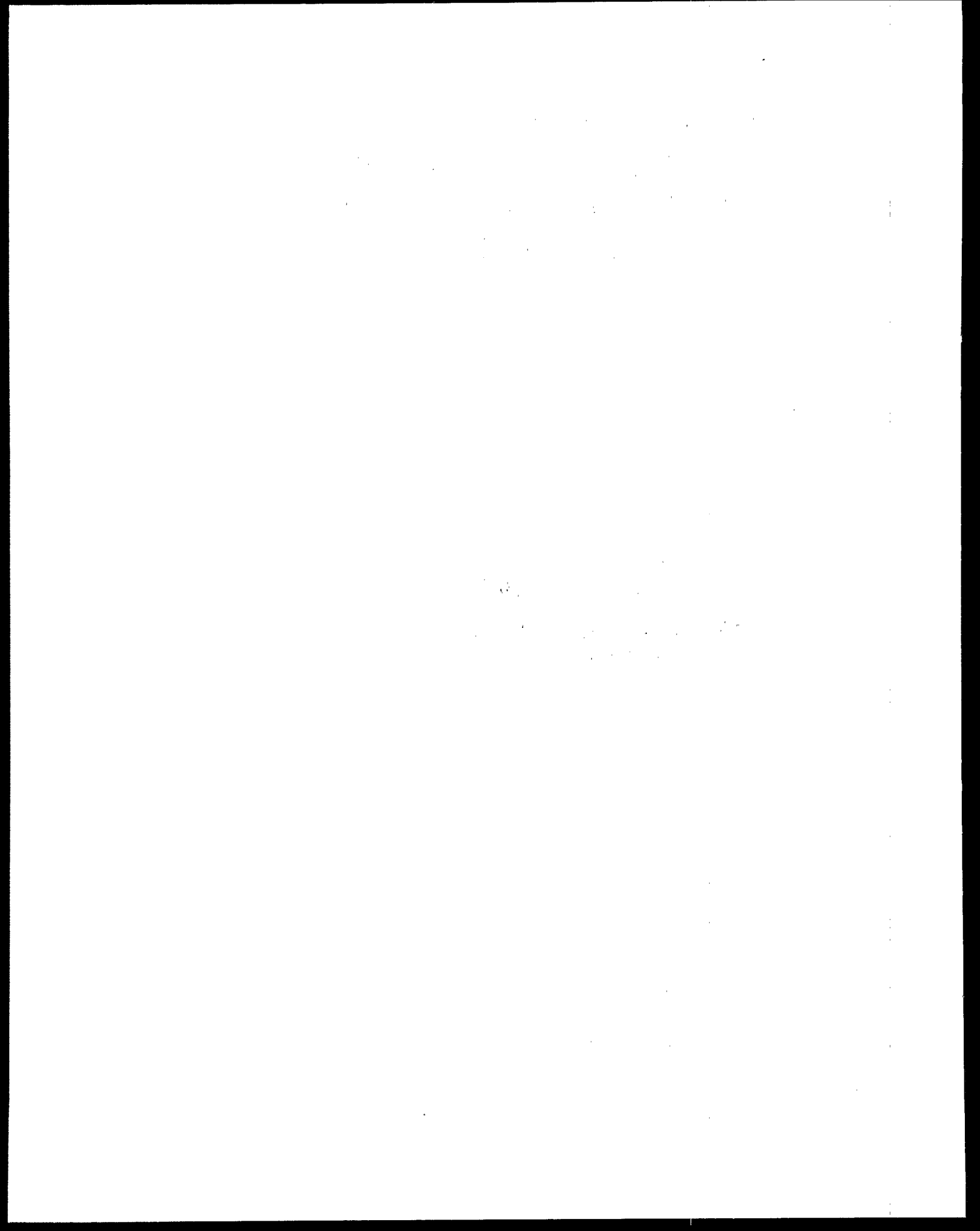
EPA, ORD. 1998. Technical Approaches to Characterizing and Cleaning Up Iron and Steel Mill Sites Under the Brownfields Initiative, EPA/625/R-98/007. December.

EPA, ORD. 1999. Technical Approaches to Characterizing and Cleaning Up Metal Finishing Sites Under the Brownfields Initiative, EPA/625/R-98/006. March.

EPA, OSWER. 1998. Quality Assurance Guidance for Conducting Brownfields Site Assessments, EPA 540-R-98-038. September.

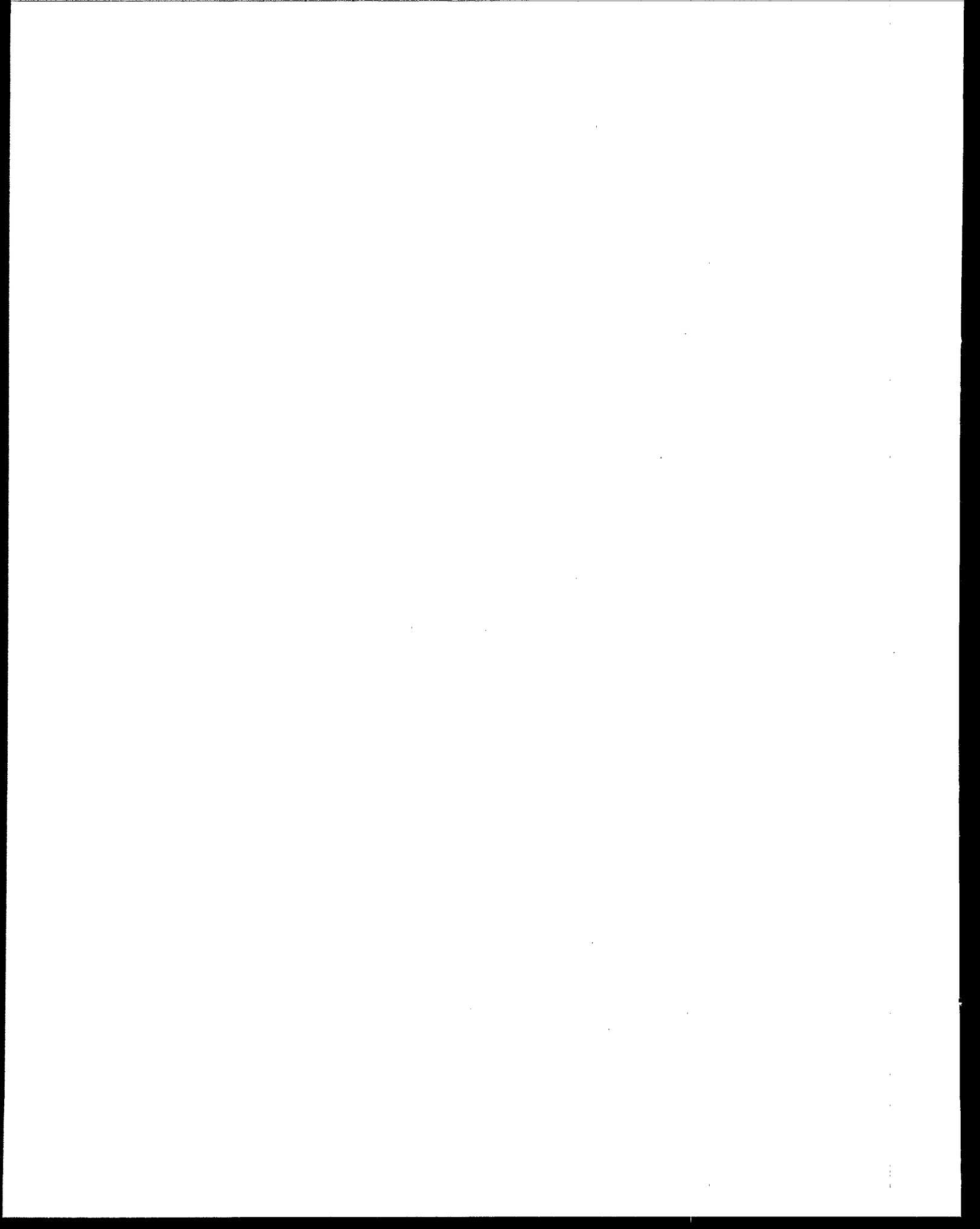
EPA, OSWER. 1999. Road Map to Understanding Innovative Technology Options for Brownfields Investigation and Cleanup, Second Edition EPA-542-B-99-009.

EPA, OSWER. Tool Kit of Information Resources for Brownfields Investigation and Cleanup, CD-Rom.



APPENDIX B

PROMOTING INNOVATIVE TECHNOLOGIES AT BROWNFIELDS SITES: FACT SHEET





Road Map to Understanding Innovative Technology Options for Brownfields Investigation and Cleanup, Second Edition Fact Sheet and Order Information

The Brownfields Economic Redevelopment Initiative empowers states, communities, and other stakeholders to work together to address the economic redevelopment of abandoned sites that have been used for industrial and commercial purposes. The U.S. Environmental Protection Agency's (EPA) Technology Innovation Office (TIO) offers assistance to brownfields stakeholders in meeting the challenges of site cleanup and redevelopment. TIO encourages the use of innovative, cost-effective technologies to characterize and clean up contaminated sites. To achieve that goal, TIO works with representatives of government, both inside and outside EPA, and industry to identify better, faster, and cheaper options for cleanup.

TIO is pleased to announce the availability of the second edition of the *Road Map to Understanding Innovative Technology Options for Brownfields Investigation and Cleanup* and the *Tool Kit of Information Resources for Brownfields Investigation and Cleanup CD-ROM* which introduce brownfields stakeholders to technology options and available information resources. Used together, the resources link technology options to the general steps involved in the characterization and cleanup of a brownfields site. The publications help decision makers at brownfields sites identify and understand the full range of technology options for assessing, and, if necessary, addressing contamination at a site.

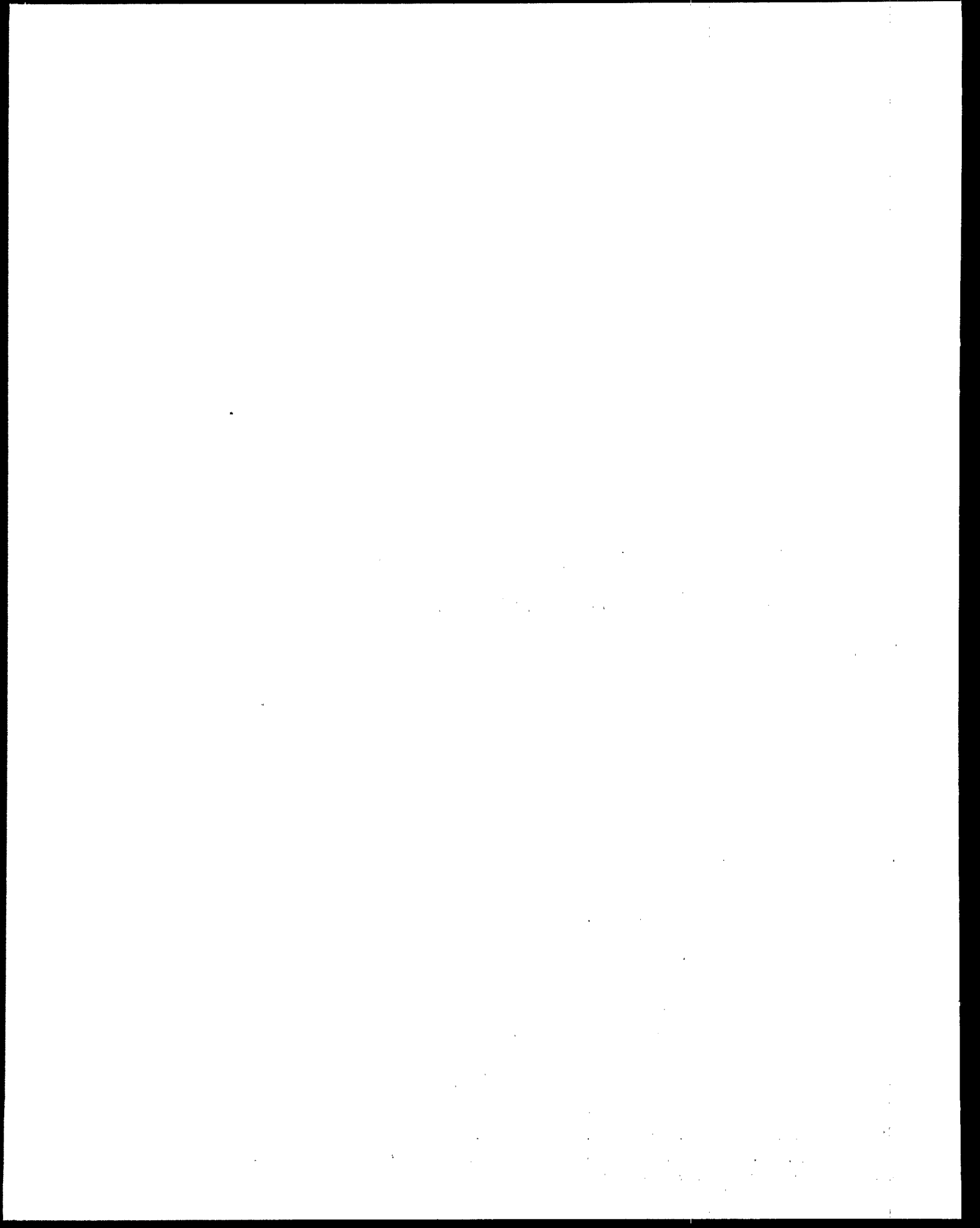
Road Map to Understanding Innovative Technology Options for Brownfields Investigation and Cleanup, Second Edition

The second edition of the Road Map, which has been expanded significantly to include new and updated resources, identifies potential technology options available at each of the basic phases involved in the characterization and cleanup of brownfields sites—Site Assessment, Site Investigation, Cleanup Options, and Cleanup Design and Implementation. The Road Map is not a guidance document. Rather, each section describes the steps involved in the characterization and cleanup of brownfields sites and connects those steps with available resources. Appendices in the Road Map include a list of common contaminants found at typical brownfields sites, a detailed guide to common environmental terms and acronyms, and a list of state and EPA points of contact.

Tool Kit of Information Resources for Brownfields Investigation and Cleanup CD-ROM

The Road Map is accompanied by the Tool Kit CD-ROM. The organization of the CD-ROM matches that of the Road Map — by sections titled "Before You Begin," "Site Assessment," "Site Investigation," "Cleanup Options," and "Cleanup Design and Implementation." Each of the resources identified in the Road Map can either be viewed or downloaded directly from the CD-ROM, or accessed or ordered on line using links provided on the CD-ROM. The resources can be searched alphabetically by title and by section.







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